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The Management of Distance in Remote-Work Environments: A Deleuzian Approach

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ABSTRACT:

The rising incidence of remote work practices over the last decades has introduced radical changes in organizational practices for managing people. Such environments indeed often lead to challenges that are difficult for both employees and managers to overcome. These difficulties are mostly linked to the management of distance, particularly prominent in remote work – physical, temporal, or cultural distances especially. Although several organizational theories have been used to suggest solutions to these specific issues, little attention has been paid so far to philosophical literature; in this research, we use the work of French philosopher, Gilles Deleuze, to develop a meaningful framework to analyze the management of distance in remote work contexts. This allows us to reconsider and question traditional theories with regard to remote work and global distributed teams, by stressing out manifestations that are significant of the emergence of these specific environments such as the cultural deterritorialization or the formation of more subtle but powerful modalities of control.

Keywords:

Remote work, distance, Gilles Deleuze, distributed teams, cultural distance.

INTRODUCTION:

In congruence with its rising development in our contemporary world, the debate about remote work has been especially prominent in the academic literature for the last few years. In a society where the physical office-based work was the norm for decades, challenges induced by remote work are difficult to overcome for both employees and managers. Below, we use the terms work-at-distance and remote work interchangeably. We define any mode of work organization that employs tele-mediated or controlled methods of overseeing either isolated individuals (e.g., home-based or office-based workers in the form of telecommuting) or collaborative work (such as virtual teams) (Huws & O'Reagan, 2001). Based on this definition, we identify four variables as important attributes of remote work environments: (1) the constitution and definition of the team, (2) the perception of virtuality; (3) the cultural differences among members geographically dispersed, and (4) the forms of control that managers use to oversee team members.

Consistent with this observation, a survey by Gibson & Gibbs (2006) reported that over 143 articles published between 2000 and 2006 contained one of the following terms characteristic of remote work: work-at-distance, geographic dispersion, electronic dependence, national diversity, and membership. Allusions to structure and membership globally refer to the definition of the team, and geographic dispersion/electronic dependence or geographic dispersion/national diversity respectively refer to virtuality and national differences. Although Gibson and Gibbs did not mention the concept of control in their review, we believe it is an important element in research on remote work. Indeed, numerous distinctions are introduced by the control of virtual entities in comparison to more traditional workgroups: it is especially notable that direct behavioral control (e.g., through face-to-face supervision or so-called "Management by Walking Around") is not possible when members are physically distant. Including control as a fourth element of distributed work is particularly relevant, especially given the conclusion of O'Leary & Cummings (2001), who assert that numerous constraints resulting from the structure, virtuality and cultural diversity may make any monitoring and control of virtual teams impossible.

In this study, we use the works of French Philosopher Gilles Deleuze as a theoretical framework, taking into account that he developed "a new set of conceptual tools which offer a basis for reassessing the ontological status of organization in the changing and virtually shaped environment of the twenty-first century" (Linstead & Thanem, 2006). The choice of this

author is not innocent and is motivated by the numerous arguments introduced in his literature in order to question our traditional vision of space and concepts that can nowadays explain this current trend of spatial burst in our working-life. Deleuze indeed describes the emergence of a world integrated capitalism (Deleuze & Guattari, 1980) succeeding to the classic capitalism that we know since the beginning of the XXth Century, symbolized by a smooth space with disorganized and nomadic movements that necessitate a reconsideration of elements such as control, perception of territories and cultures.

The use of Deleuzian concepts has already pervaded several different areas, not just philosophy, but also theater, literature, contemporary painting, or architecture. Yet, Deleuze promoted the notion of "pop philosophy" (Deleuze, 1990a) as a sort of toolbox that is accessible to everyone, and where his ideas can be applied to a variety of domains – even those apparently remote from philosophy. Nevertheless, with the exception of few studies (Linstead & Thanem 2007) or occasional references to the concept of *societies of control* (Zarifian, 2004; Leclerq, 2008), management and IS researchers have paid little attention to his philosophical contributions.

At a time when the nature of management is changing due to tele-mediated work, we suggest that a Deleuzian perspective provides a useful interpretive lens for better understanding the context of remote work.

LITERATURE REVIEW:

The emergence of remote-work environments several years ago has drastically changed our day-to-day managerial perspectives. At the time when work-at-distance started spreading, our society was still used to a physical office-based way of working that was the norm for decades. Any organizations were constituted according to a traditional space-continuum that both managers and employees ran for generations. The revolution induced by the emergence of remote-work consisted in the reconsideration of this traditional space-time continuum, introducing new challenges difficult to overcome for individuals.

French philosopher Gilles Deleuze early anticipated this evolution characterizing the transformation of our classical capitalism, the social and economical system predominating for more than a century, to a more global integrated form set apart by new societal elements. According to him, "at the complementary and dominant level of integrated (or rather integrating) world capitalism, a new smooth space is produced in which capital reaches its 'absolute' speed, based on machinic components rather than the human component of labor" (Deleuze & Guattari, 1980). This "smooth" space is a space of distances and proximities, open and non-polarized, associated to nomadism, and in opposition to previous "striated" spaces made of measures, metrics and properties, organized in hierarchy and associated to sedentarism. Besides, this smooth space is conducive to a *rhizomatic* growth, it means with no real organization in hierarchy characteristic of opposite striated spaces.

The assimilation towards remote-work and some of its core elements such as ICTs and Internet appears thus as particularly visible. Indeed, through the description of this entity, we recognize a model particularly representative of some of our contemporary phenomena characterized by the dissolution of boundaries and structures, the valorization of fluidity, and of unplanned and spontaneous elements. In this sense, the concept of smooth space is an accurate tool for conceptualizing *virtual* environments. Internet is actually a non-directional and a non-polarized space. In contradiction, the striated space would be the paradigm of traditional media, with their linearity, their construction, their depth and their perspectives (Buydens, 2003).

With regard to these new environments, individuals are considered as nomad people, always in search of movement and change, and unfettered by systems of organization. Nomadism, as an active disposition, allows thus to understand all the territories, the visit of cultural multiplicity and the transportation of knowledge (Deleuze & Guattari, 1980). Through this action of constant move and fight again the formation of a sedentary lifestyle, individuals recreate a phenomenon of *deterritorialization*, it means the exclusion of cultural elements from their spatial and temporal location.

But according to Deleuze, the concept of nomadism adopts a broader perspective. The nomadic way exists actually in sharp contrast to the rigid and static boundaries of the institutions: it is a form of thought that follows a line of flight for avoiding the control of institutional forces. This is particularly symptomatic of the evolution of our societies, societies that Deleuze characterizes as societies of control (Deleuze, 1990).

In this analysis of the evolution of our contemporary societies, Deleuze actually investigates the transformation of our traditional perception of the space-time continuum and the new distances that this phenomenon induces. These smooth spaces, as he call them, that emerged appears to have similar characteristics to work-at-distance environments, such as a rhizome structure, the predominance of virtuality, cultural trends of deterritorialization and specific modalities of control. In this first part, we propose thus to precisely emphasize each of these concepts in order to underline the parallel between Deleuze's theory and remote-work environments.

Deleuze's Definition of Team:

According to Deleuze, every individual is in contact with several groups of relationships: family, colleagues, close friends, couple, etc... Yet, his communication and behaviors with regard to these specific groups are not identical. The individual thus cannot be considered as a holistic entity: each person has multiple personalities and behaviors, such that he is no longer unified or standardized, and thus becomes "dividual" in Deleuze's terminology (Deleuze & Guattari, 1972; Deleuze, 1990b).

As an extension of this concept of dividuality, Deleuze does not refer to a central organizational point (*i.e.*, the individual as a subject) but rather to a spatial structure as a whole, introducing the concept of *rhizome*. The rhizome is a dynamic and chaotic "weed" formation which, opposed to the hierarchical structure of the tree, involves spontaneous, unpredictable and distant connections between heterogeneous elements (Linstead & Thanem, 2007). Each element in the structure can thus influence the behavior and thinking of other elements, regardless of its position (e.g., without regard to hierarchy or location) (Deleuze & Guattari, 1972).

Such a notion of human interaction appears to be particularly valuable for cooperative forms of work-at-distance, where virtual teams are often temporarily constituted without having a concrete or stable hierarchy from the beginning. Nevertheless, the negative side of this rhizome structure is that remote work employees may express difficulty in identifying with other team members and in delimiting the scope of the group itself. The outcomes can thus be tremendous as it is clear that participation and collaboration between members will have a significant effect on the performance of distributed virtual teams (Jarvenpaa & Leidner, 1999, Pauleen & Yoong, 2001, Janssens & Brett, 2006). The nature of these members' relationships explain why we label these entities as teams: they represent more than just a group of people (Anzieu & Martin, 1990). One goal of our study is thus to observe how team members define and delimit their roles in remote work environments.

Virtuality:

The debate on the definition of virtuality has been particularly intense and longstanding. It started with the scholastic philosophy, according to which something is virtual when it is in power, not in act. In this sense, the terms *virtual* and *real* should not be in opposition with each other, but instead the term virtual will rather be considered as an opposite of something that is *actual*, which exists concretely.

Consistent with these observations, Deleuze (1996), while referring to virtual, considers an aspect of reality that is not material, but still is real. The virtual is thus opposed to the territorial, to what is already settled. Deleuze expressed this in his statement that "the virtual is not opposed to the real, it possesses a full reality itself" (Deleuze, 1968).

Lévy (1995) used the metaphors of the tree and its seed plant to describe the notion of virtual: within the seed lies the possibility of the tree, a virtual tree that has not yet been actualized. The tree's form is not however completely determined by the seed, as numerous elements take part in shaping its development (the weather, the amount of shade, the quality of the soil, etc..).

This discussion leads us to the distinction between objective (actual) and perceived (virtual) proximity (Wilson et al., 2008). Indeed, previous academic assumptions assume that interpersonal affinities and relationships are weaker when people work remote instead of face-to-face (Brown 1995, Kiesler & Cummings 2002). As asserted by Scott, there is "a need for more sophisticated research to explore this phenomenon. Clearly, not enough emphasis has been placed on "*what it means to be dispersed* from others" (1999). Treating distance and proximity in purely physical terms provides an incomplete view of how people experience remote work. Instead, we suggest the notion of *perceived proximity* – an asymmetric construct describing the relationship between coworker dyads, describing one person's perception of how close or how far another person is (Wilson et al., 2008).

This asymmetric nature of perceived proximity is central to understanding distributed teams – as a coworker relationship that is perceived as *far* to one person may be perceived as *close* to another (Harrison-Hill 2001). We thus recognize the paradox between perceived proximity and physical proximity. It is thus important to define concrete degrees of virtuality within teams, in order to analyze how virtualization is perceived and understood by individuals.

Influence of national culture:

Nowadays, the general trend toward virtualization has an impact not only on ICTs, but also on bodies, our global economical functioning, or collective frameworks, which thus leads to influence individuals' perception of their territory (Lévy, 1995). The relationship between virtuality and territory appears to be particularly obvious through the concept of *deterritorialization*, which is a direct consequence of the phenomenon of virtualization (Deleuze and Guattari, 1972).

According to Deleuze and Guattari, deterritorialization implies distorting some material elements from their initial use to potentially relieve them from coercion and oppression.

From an anthropological point of view, deterritorialization refers to removing a cultural subject (and related material objects) from a specific location in space and time, which is particularly meaningful in the context of work-at-distance, where certain cultural aspects transcend fixed territorial boundaries. When a person, a community, or some information deterritorialize themselves, they detach themselves from the ordinary physical and geographical spaces and from the confines of time and date. Despite this deterritorialization, these members are not totally independent of the referential space-time continuum, as they must still have a physical location and they must still be, and keep being updated. This is consistent with the concept of "everyware" (Lévy, 1995), characteristic of tools and services to which we can have access everytime and from everywhere, especially through the Web and by working-at-distance.

Although Deleuze and Guattari introduce the concept of deterritorialization as a form of disintegration of oppressive structures, other authors use this term more in the sense of the disintegration of territorial structures (Rodota 1999). As much as reducing distance was essential in a local world, enjoying proximity is fundamental in a global world: we have recently moved from a world constrained by distance to a world where our challenge is to manage proximities. Taking into account that deterritorialization means that cultural subjects and objects are removed from a fixed location in space and time, we need to examine how this process is concretely manifested within the context of global work-at-distance.

Control:

Drawing on Foucault's "Discipline and Punish" (1975), Deleuze argues that our environment has shifted from *disciplinary societies* - characterized by societies that equipped themselves with machines involving energy, to *societies of control* - that operate with machines of a third type, computers, etc...

By considering "societies of control", Deleuze seeks to characterize the global crisis of our institutions, and the progressive and dispersed installation of a new system of domination. Indeed, unlike disciplinary societies, societies of control no longer lead to a physical confinement of individuals but rather exercise a continuous control through instantaneous communication permitted by the numerous developments of ICTs (Leclercq, 2008). Control is actually short-term, but also continuous and without limits, while discipline was of long duration, infinite and discontinuous. Our society shifted then from humans focused on disciplines to humans focused on control, who must report their results to the hierarchy.

The emergence of societies of control is consistent with the development of ICTs as it is clear that these technologies have brought new ways of controlling various work activities, especially the ones where information is used and processed. But although the emergence of work-at-distance has truly constituted an improvement in employees' approach to emancipation, it remains paradoxically that it creates a more subtle form of isolation than the confinement of disciplinary societies. Thanks to the decrease of confinement that they introduce, societies of control seem indeed at first to offer new freedoms to individuals, but "participate as well in mechanisms of control that are equal to the harshest of confinements" (Deleuze, 1990b) by introducing a new system of domination.

By extending such theoretical observations, and taking into account that the work-at-distance representations redefine the notion of workplace and change the organizational environment, we may want to question the relevance of traditional control theories by examining how few manifestations of societies of control are visible in a global remote-work context.

Having previously identified four core-elements of distances to manage in work-at-distances elements, we just browsed elements of Deleuze's philosophy that would enable us to adopt an original theoretical lens.

Consistent to this theoretical part, we aim to answer in this study the following issue: How is the notion of distance managed and its four core elements operating in remote-work environments?

METHODOLOGY:

EADS (European Aeronautic Defense and Space company) is a large European Conglomerate that develops and markets civil and military aircraft, as well as communications systems, missiles, space rockets, satellites, and related systems. The group was formed by the merger in July 2000 of DaimlerChrysler Aerospace AG (DASA) of Germany, Aerospatiale-Matra of France, and Construccionnes Aeronauticas SA (CASA) of Spain. The company is organized into a Corporate entity, which oversees four distinct divisions: Airbus, Eurocopter, Astrium, and Defence & Security.

The field work was conducted using a qualitative, interpretive methodology within EADS Corporate, specifically within the department of Human Resources/Competency Development. This department is divided into five units, each dealing with a distinct domain, but all still interacting with the different units and divisions of the group. The staff is mostly comprised of French and German employees, who are evenly dispersed between two different sites (Paris, France and Ottobrunn, Germany).

We achieved a total of 14 structured and semi-structured, face-to-face interviews, lasting about 50 minutes each. In detail, four interviews were conducted in Paris offices, while the other 10 were realized in Ottobrunn. Nine were performed in French (on both sites) and the rest of them in English (all in Germany). These interviews were conducted face-to-face, individually, tape recorded and then transcribed as soon as possible to preserve the quality of information. The interview guide included four broad topic areas consistent with our theoretical parts. Data gathered from the interviews were analyzed using NVivo 8 Software. Interviews were coded in two rounds of coding: a second round of "interpretive" coding enabled the move beyond the prior descriptive codes (Miles & Huberman, 1994).

RESULTS:

As described in our first part, we propose to emphasize four elements of managing in work-at-distance environments: members' definition of team boundary, members' perception of virtuality, the issue of cultural diversity, and the issue of control. We organize our results into these four themes, below.

Team definition:

Through our analysis, team boundaries seem to be facilitated in part by the presence of distinct units within the department. Indeed, informants seem to reliably distinguish team members from non-team members. When they are asked to define the team of which they are a part, an interesting outcome is the dichotomy between the response of managers and their subordinates. Managers only emphasize on positive aspects of the interdependence of individuals belonging to the team, with answers corresponding closely to rhizhome image where each element can influence any other, regardless of its position.

"If I had to describe my team, I would say that it is like the metaphor of an onion: there are different layers. Everything is linked between them: this is why I talked about co-construction" (Manager #4)

The awareness of the rhizome structure is less clear to non-managers, but they recognize that their integration with other members often lead to the emergence of specific subgroups within a team. These subgroups may occur, due to factors such as:

- Geographic distance: individuals who are collocated on a site may develop strong subgroup bonds with their local team members. Such local subgroup members then exchange information and share of similar values and norms – which are not shared by members external to their subgroup.

- Task-oriented subgroups: individuals who share similar job functions, professional background, or expertise may develop strong bonds with each other, thus forming subgroups which separate them from other team members with distinct expertise and role.

In a global way, membership matters. Nevertheless, negative dynamics linked to the emergence of these orbiting "in-groups" (Mortensen, 2009) exist: some subgroup members may perceive more conflict with non-subgroup members, or perceive that their contributions are not being taken into account, despite their managers frequently reminding them that they are "all in the same boat" (to cite a phrase used by Manager #4).

Control issue:

A common characteristic of these teams is also linked to the way they are controlled: by being imposed a management by objectives, members of teams have shared goals to achieve. The lack of specific procedures to follow and of managers' behavioral control over their work signal the absence of any forms of control for members we interviewed:

"(The control process) is very easy. If you want, it is very natural, it is really very natural. Everyone knows what s/he has to do, (the manager) just looks after. As I said, it is very natural: it is...how can I say that...it is not a control with procedures at all!" (Member #13, translated from French by the author)

This mode of management requires members to be autonomous and to develop their own self-control ("phenomenon that a person behaves in a way consistent with organizational goals without being subject to external controls" Wang, 2008):

"We absolutely need individuals who are autonomous. The person has to know what s/he has to do, and has to do that without any issue linked to autonomy. This is one of the most important criteria for recruitment: the autonomy." (Manager #2, translated from French by the author)

We identify a concrete example of what Deleuze described as *societies of control*, where a new sense of freedom is offered to individuals but some control mechanisms are still present, for instance, the fact that employees have to self-manage themselves. However, it appears that this sense of emancipation from traditional control is paradoxically penalizing for members who are new to working on distributed teams:

"I think that this is a perfect mode of management for someone who is an experienced person. Conversely, this mode will not provide the same results with someone who is a novice as you need a certain framework while beginning. The manager may have different systems of management to apply: a subtle kind of control for experienced employees, and conversely a more formal one for novices." (Member #13, translated from French by the author)

This statement actually reflects the downside of so-called "swift trust" (Meyerson et al. 1996), - when team members lack sufficient time to build trust in their peers, they must assume that other members are trustworthy. By trusting others blindly at the start of a project, newcomers can indeed actually be penalized by feeling isolated and not supervised by their manager, when they definitely need it. As a concrete example, members who are inexperienced with this type of work environment may experience anxiety or lower trust in their team members (Piccoli & Ives, 2002), due to their own negative interpretations of silence (e.g., no immediate response to sent email messages, or as a result of timezone differences if communicating with an overseas employee).

Virtuality:

A distinction has to be made between objective (actual) and perceived (virtual) proximity. In our context, even though the objective proximity is particularly low (people geographically dispersed between France and Germany), perceived proximity is conversely extremely high between members: most of them indeed assert that, while distance is definitely part of their job, it does not create an insurmountable obstacle. One informant stated: *"frankly, it is almost the same for me dealing with my*

partner in Chile than if I had to deal with someone from the Astrium site situated on the other side of the street" (Member #8)).

As expected, this sense of perceived proximity, despite being remote, is facilitated by the frequent use of basic ICTs – those considered lean in media richness terms – rather than in terms of rich modes of communication. Indeed, basic email and individual phone conversations are the principal ICTs utilized, since the use of more sophisticated technologies (e.g., videoconferencing or audioconferencing) is avoided -- or even restricted, due to logistical issues (i.e., the large number of potential participants on a conference call) or structural barriers (high-security computer servers forbid the use of videoconferencing, in part due to the potentially sensitive nature of the aerospace projects in which EADS is engaged).

The team definition and the integration among members previously described also have strong positive effects on perceived proximity, since the rhizome structure enables the sense of having a dense network of connections among team members, facilitating the identification with other members through the sense of shared, mutual goals that benefits collaboration.

"I became very attached to members of the team in Munich, although it is true we do not work on the same site, but it is enough for creating an 'affective' connection...I mean, social links: we really like each other, and I do not think it is absolutely necessary to be situated at the same location for working together and having a nice atmosphere between us." (Member #1, situated in Paris, translated from French by the author)

Cultural issue and deterritorialization:

The phenomenon of deterritorialization, which refers to the exclusion of cultural subjects and objects from a certain location in space and time, is especially visible through the analysis of our research field: although every member considers the cultural diversity as an opportunity in general and for the company, most cannot identify or recognize such national particularities in their daily work:

"Today, I really think the divisional structure is more important than...countries, or the national aspect. I do not really think...I mean 'oh, this is because Germans act like this' or 'you see, this is how French react, or how Spanish, etc...'. This is not something that strikes me every day. I would rather be willing to say 'oh, you see that: this is an Airbus perspective, or an Astrium perspective' " (Manager #4).

"Personally, I really do not sense it (i.e., the cultural diversity) because it is something totally obvious and normal for me, I mean, I do not really consider it as a difference" (Member #8).

"(The cultural diversity) never disturbed me, I do not know...Frankly, I cannot recognize any confrontation about the way of managing people for instance, or any troubles due to national culture about the way of communicating" (Manager #2, translated from French by the author).

Interestingly, even though cultural diversity is sometimes considered as a constraint to team functioning, especially when members of such distributed teams try to communicate and cooperate, our informants recognized this diversity as an opportunity and a "richness" (this word was used by our interviewees a total of 14 times). Nevertheless, although they almost all vaunt its merits, team members paradoxically cannot identify cultural differences between themselves and their counterparts in another country – as if they had overlooked it in their daily work as virtual team members. This observation is particularly representative of the emergence of the phenomenon of *deterritorialization* in the context of remote-work. By enabling the collaboration of people from different cultures who are geographically dispersed around the world, the work-at-distance, as a recent way of working, leads to the smoothing of cultural differences and particularities.

Conclusion:

This paper makes several contributions to research and practice. From an academic point of view, we show how philosophical concepts introduced by Gilles Deleuze can be used to analyze the management of distance in the context of remote-work (e.g., rhizome structure, deterritorialization, societies of control). By taking into account members' interpretations regarding their definition of the team entity and perceptions regarding concepts such as control, cultural diversity or virtualization, we can gain insights into the transformation of our working life from past constraints – dealing with concrete distances – to new challenges: managing perceived proximity.

Specifically, the results of our study allow us to moderate the impact of several factors previously described in academic research: the influence of objective geographic distance and cultural differences on team members' cognition and behavior in virtual teams, or the positive aspects of encouraging a "swift trust" with virtual team novices. Finally, through our analysis of virtual entities within the EADS conglomerate, our study provides a unique practical application of Deleuze's philosophy in a real-world setting.

Our contributions must be understood alongside the limitations of our single case study research design: because of its own distinct characteristics, EADS can indeed appear to be a unique and particular company, which may make generalization to other settings problematic. Team members that we interviewed also may benefit from a particular bias. Thanks to their formal academic formation (i.e. graduated from Business/Engineering Schools or MBA), all our interviewees are familiar with international management and aware of challenges of cross-cultural management and of dealing with multicultural teams. Besides, the decision to join this specific distributed team is primarily an individual choice that reflects employees' willingness to interact with culturally-diverse members. This situation is clearly different from many operational teams where employees from different nationalities are mandated to work together. In such cases, by being mostly suffered, cross-cultural differences are likely to create a different set of experiences and outcomes.

Future research will thus need to include comparative case studies developing this exact same methodology at a more operational level of the company – rather than the knowledge/functional level analyzed here.

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